

Fighting Cancer With Radium a Problem for Medical Science

Controlling the Three So-called Rays Projected From Substance the Real Battle—Radium Accomplishing Curative Marvels

RADIUM can cure cancer, but not all cancerous growths. This, in short, is the state of the battle which is being waged between this precious substance and this disease. Wellnigh all forms of external cancer have surrendered completely to the attack of the curative gamma rays, but mysteriously as violent tumors, &c., have retreated before this therapeutic agent, still internal cancer has not yielded so willingly. In fact, in perhaps the majority of cases deep seated cancer has held its own when it came to the last phases of the struggle, although some patients have been greatly helped by this latest of treatments.

Henri Becquerel, on his way to London to lecture upon radium, placed the little receptacle holding the precious specks of that extraordinary substance in his waistcoat pocket. Days afterward, his side showed an inflamed sore, and the streak developed into a serious sore. Without knowing it and without feeling it the radium had sent its penetrating rays through the container, through the intervening clothing, and had invisibly seared the skin and some of the underlying tissue. This was the beginning of a series of brilliant experiments upon living animals, and the results suggested an application of radium to cancerous growths.

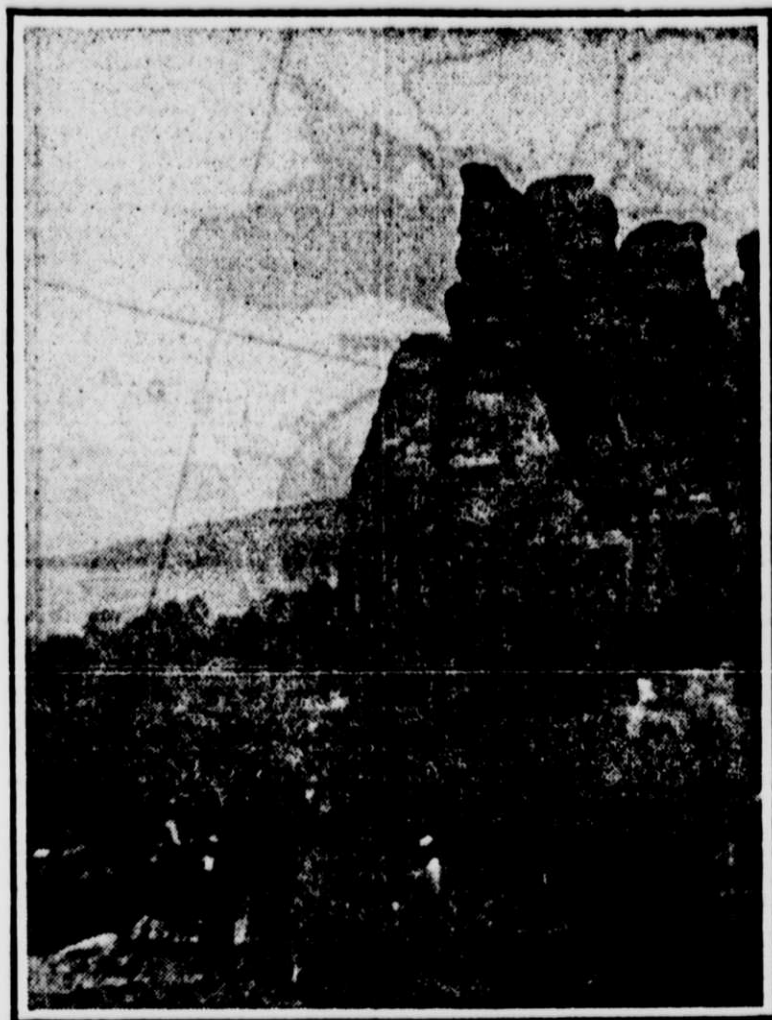
By that time Mme. Curie and others had determined broadly the nature of the so-called rays projected from radium, and the problem for medical science was to find out how these could be used and controlled for therapeutic purposes. Success was not uniformly the reward of the treatment of cancer with radium, in fact, there were many significant failures, and the medical world feared for a while that radium would go the way of previously acclaimed cures. Now we shall understand why Dr. Robert Abbe of New York City began a course of novel researches.

"We can scarcely form an opinion of the action of radiant matter upon animal cells by its action on those of vegetable life, for who can differentiate the vital force actuating each," he says. "In the laboratory of nature we study the effect of radium on seeds and bulbs. This is a foundation stone of its effect on animal cells."

"After suitable exposure of seeds to varying amounts of soft and hard rays, issuing in incessant streams from this wonder working mineral, we watch them grow and see three results: first, a death dealing force has played upon the nearby seeds so that their life is destroyed; second, upon seeds a little further removed a stimulating effect has occurred, wonderful to relate, so that their growth is greater than that of seeds which have had no radium; and, third, at distances beyond that of stimulation, where the hard gamma rays have played relentlessly on the seed life, they show a retarded vitality and are depressed in their growth more and more up to a point several inches away from the radium."

Right here it is necessary to understand the nature of the three kinds of so-called rays having their inciting origin in radium. The three rays are known as alpha, beta, and gamma rays, and each of these has characteristic peculiarities.

The alpha rays have a range inside of half an inch from their source, the beta rays reach about three times as far, and the gamma rays are yet more penetrating. A thin sheet of paper or



View of famous Paradox Valley, Col., where radium bearing carnotite has been found.

periments upon seeds and their growth subsequent to radium rays. "We can produce three different effects upon cells by the correct use of radium. First, destruction of life; second, stimulation, and third depression and retrograde change. The surgeon can utilize the third so that he can at will produce that retrograde change in cells which have shown erratic growth and formed life destroying tumors. "Partial success or discouraging failures of the past may be largely due to ignorance of the baneful influence of the alpha and beta rays, which one can now eliminate. In this, I think, we put our finger on the weak spot in radium treatment. If the beta rays stimulate we certainly do not want them; it is fair to say that gamma radiation is our aim."

To the layman the alpha rays, if they can destroy, would seem to be just the medium to employ in attacking cancer. Apparently the gamma rays can only depress or retard the activities of the malignant growth. Why not kill the malady at once and have done with it? Simply because the tissue, inflamed by the attack of the alpha rays, when besieged by the cancerous cells stimulated by the beta rays, is so that that extent weakened in its defense against the inroads of the disease.

It is here that the most wonderful part of this whole problem comes to light. To cure does not mean to root out, but rather to lead back to health. The gamma rays actually induce the affected cells to subside, lose their malignancy and again to become useful and sound elements in the body substance.

Now the far reaching gamma rays, which can be separated from the alpha and beta rays by a screen of lead or by distance alone, have actually proved

one, and the other, while still under observation, shows every sign of recovery. This brings us to a notable case of a milder form of disease: growth called papilloma upon the vocal cords. Papilloma may be described as a warty vegetation, and when attacking the larynx may not only injure or destroy the voice but may actually imperil breathing. While ordinarily in malignant growths are persistently recurring in their habits. They may do this for many years and require removal every few months. In the case of a singer, who had gone through all the distress of losing her voice and having increasing difficulty in breathing, Dr. Abbe effected a permanent cure and restoration of her singing voice by exposing the papilloma to the rays of 100 milligrams of pure radium for a period of thirty minutes.

Again, to return to those graver internal manifestations of cancer, Prof. Kroenig of Freiburg, Germany, has lately described an encouraging number of cures in instances of fibromyoma in which he used variously Roentgen rays and mesothorium, the latter being one of the radio active substances. The cures were undoubtedly made possible either by radium alone or by radium in cooperation with a judicious use of the knife. In fact, Prof. Kroenig has announced his belief that radiotherapy for this particular malady of women is in every way far superior to the usual operative treatment. In Germany mesothorium is used in place of radium because it is cheaper, but while it possesses the same curative properties, its period of utility is many, many times briefer.

It is not necessary to dwell upon the unenviable details of this grim disease, cancer, but in order to show what measure of hope is properly warranted in the suffering, three remarkable cases

old scar after the surgical removal of a small one of the same appearance eight months previously and had been rapidly increasing in size and number during four months. They varied in size and were grouped in chains and uneven purplish hummocks, more than a dozen in all, unquestionably of hopeless malignancy—probably sarcoma. "Radium by distance filtration offered peculiar advantage in this condition because of the even dissemination and cross firing of the rays. One hundred and fifty milligrams of pure radium bromide were placed in a pasteboard box covered by 1 1/2 inches of loose cotton, thereby to maintain it at an even distance from the scalp, this interval being sufficient to eliminate the alpha and beta rays. The box was placed over the main group of tumors and held there for an hour and a half. Then it was moved over the other groups in succession, each receiving lateral radiation all the time while the gamma rays played vertically over the nearest tumors. "The total exposure was seven hours, over six places. He returned to his home 500 miles away and was to write in two weeks. On the twelfth day he appeared in person with the astonishing statement that the tumors had all gone. Examination showed a normal scalp, movable and flexible as in health and nowhere a trace of former disease. Two months later his physician carefully examined him and reported that no trace of trouble could be found. This threatening growth has been entirely dispelled. "From Europe and elsewhere come reports of the adaptation of radium treatment to the circumstances of other maladies, such as rheumatism and gout, hardening of the arteries and deafness. Details are at present lacking. But it must not be forgotten that numerous cases of cancer and other malignant growths, especially when deep seated, have resolutely refused to yield permanently to the repressive effects of gamma rays. Whether or not the medical world will yet be able to overcome these obstacles time alone will tell. Dr. Abbe has said: "If we could only go a little further in these cases with radium or find some new agent to take up the battle at this point, like reinforcements of fresh troops at a decisive point, we would be nearer victory. But increase in use of radium now becomes too painful, whereas at first it always pain like an anodyne. We must therefore wait on further experiments."

This article would be incomplete without some reference to the question of available radium. Dr. Kelly having implied that the limited amount now in service restricts the number of sufferers that may be benefited at present. It should be a source of satisfaction to know that we have in this country deposits of uranium bearing ores that should make us independent of Europe and that, while not so rich as the pitchblende from the Joachimsthal mine in Bohemia, are nevertheless sufficiently plentiful to offset their lower grade. So, too, the Bureau of Mines and native enterprises have evolved efficient and economical processes which promise to make the extraction of the radium chloride or radium bromide an operation of shorter duration and greater thoroughness.

Again, the National Radium Institute, recently incorporated under the inspiration of Dr. James Douglas of this city and Dr. Howard A. Kelly of Baltimore, has acquired a number of radium claims in the well known Paradox Valley of Colorado, and from the ore there, called carnotite, it is estimated that something like two hundred grams of radium may be procured in time. Two hundred grams—gram being equal to 15.4 tray grains—may not seem to be of much moment, but physicians to-day are working with only a few milligrams and yet so potent are the gamma rays from these tiny particles that remedial wonders are being accomplished.

The need of domestic conservation can be realized more fully if we recall how the price for radium salts has risen. In 1903 a milligram cost about \$2, now \$40 is demanded for the same quantity, and until recently all of the came from abroad. Our carnotite mines have supplied two-thirds of the raw material refined in Germany and France. The Bureau of Mines intends to show how this can be done economically and profitably at home.

Radium is accomplishing curative marvels, and possibly when physicians have more of it even greater things may be achieved, but we must still remember that this wonderful substance has not yet supplanted the knife-time only will tell us if this may be possible.

SAYS WOMEN IN FRANCE LOST RIGHTS IN 1789

Dowager Duchesse d'Uzes Insists They Were Equal to Men Before Revolution.

Special Correspondence to THE SUN.

PARIS, Dec. 26.—The dowager Duchesse d'Uzes lectured last week before the Lyceum Club, with many men guests present, on "Woman Suffrage From the Historical Viewpoint." She pointed out that women in France enjoyed equal rights with men from 1812 until the Napoleonic code came into force after the revolution of 1789. The Duchess described the lives of men and women in prehistoric days when caves were their homes and men hunted and fought while women reared the family and sharpened the flints for weapons. "It was only with the advance of civilization," she said, "that man, little by little, claimed superiority in brain power, thanks to the greater opportunity for intellectual development given to him by the greater facility he enjoyed in escaping the material duties of the household. She denied that such superiority is inborn and that it is more probable that these educated women preferred to remain single than marry less educated men than themselves. For never can the maternal flint be rent from a woman's heart, nor will the knowledge of the qualities of the next come ever make her refuse to listen to the baby wail that calls for mother."

The Duchess spoke against militancy, saying that without wishing to impugn the motives of those who practiced it, we cannot sufficiently sign the memorial to the House of Commons for the franchise to women do not perform military duty, as men, excused from service as unfit, are not deprived of the vote, while many a Red Cross nurse has died from overwork.

MARVELS OF ICE AND SNOW IN HIMALAYAS

Mrs. Fanny Bullock Workman Tells of Exploration at 20,000 Feet Altitude.

VIRGIN PEAKS SCALED

Traces of Vanished City of Ice Found on Pinnacle of the World.

Special Correspondence to THE SUN.

LONDON, Dec. 26.—Before a large and interested audience of members of the Royal Geographical Society at Burlington gardens recently, Mrs. Fanny Bullock Workman and Dr. William Hunter Workman, the American explorers of the Himalayas, lectured on some of the results of their latest expedition among the enormous glaciers and dizzy peaks on the very pinnacle of the world. It was a fascinating story that Mrs. Workman had to tell, illustrated with lantern slides which gave some idea of the titanic scale of the country they were exploring, in Baltistan, somewhere in the corner where India, Tibet and Turkestan meet in a jumble of terrible peaks, shooting up to anything between 20,000 feet and 24,500 feet, many of them little short of Everest itself. There is a giant, for instance, known simply as "Peak 26," which rises to a height of 25,415 feet. It is impossible to give here the geographical results of the expedition in the summer of 1912. For four weeks the explorers were almost continually at an altitude of over 17,000 feet. Most of the work was devoted to an exploration of the Siachen or Rose glacier, the largest in the world outside the Polar regions, rising to a height of 20,938 feet, and falling 8,816 feet in its great length

of forty-five miles. Throughout their rambles in these great altitudes Dr. and Mrs. Workman were attended by three faithful black cows which fed at the various camps pitched. In a very matter of fact manner Mrs. Bullock Workman described the scaling of virgin peaks much as an ordinary woman would describe climbing up the Monument. Here is an example: "A peak which I am about to mention strikes the eye north, being one of the landmarks of the Bilahond Pass. I had selected this mountain as offering a probable fine point of view in 1911, but the weather when we were in its vicinity was unfavorable for its ascent. If it were ever to be climbed this seemed to be the opportunity. The caravan was accordingly divided, the snow one continuing on to Lohopond, while we with a smaller one, leaving the pass, descended north to a snow hollow, from which a steep furrowed slope led us to a large plateau where camp was pitched in the snow at 19,000 feet. "The next day more slopes were ascended to a rock ridge jutting out below the main peak. Here Dr. Hunter Workman set up his cameras and instruments and remained at 19,500 feet, while I continued upward with three guides. It was a rather difficult climb, the middle part being decidedly precarious owing to the melting of the snow, through which we sank on to hard, black ice, which necessitated constant step cutting. On the whole, however, the snow was deeper and more stable. The gradient was from 45 to 60 degrees."

Found Flowers on Glaciers. Up in these frozen regions of the Himalayas flowers were found and a grass land bounded by the glaciers and rocks. The Siachen Glacier is named after roses. The lecturer explained: "Sia is the Balti name for jungle rose, and then means a collection of thorns. Such wild rose bushes are prevalent in the naals and flourish in pink and white splendor to the foot of the glaciers in the part of Baltistan where the snow is correctly spoken is gatural and requires an effort to pronounce and to my taste the English name Rose Glacier is quite appropriate. Its very incongruity as applied to this huge ice sheet places the fancy. On many glaciers the jungle rose is found on mountain flanks well above the snow, but on the lower Siachen flanks one is fortunate to find stunted edelweiss and other small alpine flora, while on the route of its upper thirty miles only snow roses thrive. Ice formations resembling roses I noticed in some of its chambers."

There is a legend that there was once a flourishing city high up in these forbidding regions, the fabled city of Tarim Shehr, which the Baltis destroyed by magic as the result of a feud with the Yarkandis who inhabited it. "This is a unique spot in the heart of this ice world," said the lecturer, "surrounded on all sides by miles of glaciers and ice giant peaks and may well be named Tarim Shehr, or 'last oasis.' Thus spelled Shehr in Persian means 'city,' and in the legend furnished me by the 'learned man' there was supposed to be an ancient city

LONDON OPERA HOUSE HAD CHECKERED LIFE

Theatre Built by Hammerstein Has Been Disastrous to All Managers.

OPERA VENTURE A FAILURE

Circus, Vaudeville and Moving Pictures Have Been Equally Unsuccessful.

Special Correspondence to THE SUN.

LONDON, Dec. 26.—As was reported by cable to THE SUN recently, Oscar Hammerstein's "London Opera House" is passing through another of the crises that have been so thrilling a feature of its existence. On the last Saturday night there were only about 500 people in the house, which seats at least 2,000, and without warning of any kind the directors decided to close down as soon as the performance was over. The show at the time consisted of a combined circus and monomaniac with a troupe of accomplished midgets. "The following short resume of the history of Mr. Hammerstein's London venture will show how checkered has been its short career. The site on Kingsway, just off the eastern end of the Strand, belongs to the London County Council, and was leased to Oscar Hammerstein in 1910 on a ninety-nine years lease at \$24,375 a year, which forms a first charge on the undertaking."

Refused \$500,000 for Building. Then Mr. Hammerstein erected the famous opera house at a cost variously estimated at between \$750,000 and \$1,000,000. Early in 1912 he is said to have refused \$500,000 for the house and also refused a rental of \$22,500 a year. The house had mortgages of \$350,000

here inhabited by Yarkandis. Here also the Baltis are said to have played polo with the Yarkandis who, from here, went to the Ghyari mala to loot the cattle of the Balti villagers. Further, the legend explains why the city was reduced to its present desolate and rock strewn state. "On one occasion the Yarkandis kidnapped a Balti woman working in a field of a Ghyari village. An important Mullah, Hazrat Ameer, was in the village at the time and he gave the enraged Baltis a Tawiz amulet, telling them to put it on the top of the Bilahond Pass and to return to their village via Yarkand. The Baltis, having done the first part, disobeyed the priest and returned the same way, by the pass, home. However, soon after a great storm visited Tarim Shehr and the snow from the mountains slipped and fell upon the city, destroying it and its people, including those who had stolen the woman. "Coolies Knew of Place. "Curiously, when first on the Rose glacier, the coolies never mentioned the place to us, and it was only when I spoke to my cook about going to the promontory that he said: 'Oh, yes; the coolies call that "Tarim Shehr," and say it is a nice home with much grass.' How they knew of it is one of those native mysteries one cannot solve. Here is a simple description of an incident somewhere up on the Siachen glacier related by the explorer, which gives a thrill to one imagines them in the trepid pinnacles of northernmost India and gazing down into Chinese Turkestan: "We came to a peak, the east shoulder of which gave a sharp bit of climbing. By this time we were well out of sight of the main Siachen reservoir, and after a descent continued along a previously unseen high snowfield. The whole tract in the deep soft snow was exhausting and we were relieved when upon contouring a reach of gaping crevasses the ridge was at last approached and distant peaks, rising from beyond a void, came into view. "The guide, stepping ahead, called out: 'Slowly, we must rope; it is a line of huge cornices.' And so it was, not one, but rows of them, extending right across the ridge to the base of sharp peaks which form the east boundary of this water parting. We went as near the edge as possible and saw these monstrous curling over in great white hoods fringed with massive icicles of ice, below these fell a perpendicular snowfall 5,000 to 6,000 feet to a basin."

First Photograph of New French Cabinet



Standing on the lowest step is Premier and Minister of Foreign Affairs Doumergue. Reading from left to right the others are: Minister of Commerce David, Under Secretary of Fine Arts Jacquier, Under Secretary of War Maguier, Minister of the Colonies Lebrun, Under Secretary of the Interior Perret, Minister of the Interior Malvy, Minister of Marine Monis, Minister of Public Works Renault wearing a derby, Minister of Public Instruction Viviani, Minister of Finance Caillaux (with his hands in his pockets), Minister of Commerce and Labor Metin, Minister of War Noulens.

M. DOUMERGUE A JOURNALIST.

New French Premier is on Staff of the "Lanterne."

PARIS, Dec. 26.—M. Doumergue, who is to see what he can make of the French Premiership, is on the staff of the "Lanterne," which journal seizes the opportunity to describe him as "charming, jovial and thick-skinned." The purists object to him because he is not sure about his subjectivities, and that is not a grave disqualification in the eyes of the practical men. He has been a Magistrate in Cochinchina and Algeria and has held in various Cabinets the office of Minister of the Colonies, of Commerce, of Public Instruction and of Fine Arts.

ELEPHANT'S TRUNK ON MENU.

Billed Hippo Tongue as Another Central African Delicacy.

LONDON, Dec. 26.—Mrs. Dan Crauford, whose book "Thinking Black," has created much controversy, mentioned some extraordinary Central African "dishes" in the course of a lecture at Aldersgate street this week. These included stewed elephant's trunk, roasted rhinoceros foot, billed hippo tongue (stewed forty-eight hours to make it tender), roast wild donkey, stewed monkey, roast water rat (head, tail and all) and the luscious morsel, which a chief provided as a St. Louis delicacy, of a morsel of thousands of white ants, frizzled in their own fat, like a sort of Central African whitebait. Also there was a special dish, much favored, of starched boiled grass, "green and glutinous."

Mrs. Crauford told of the Central African "knuts." The young bridegroom wore a necklace of teeth and hairs of the elephants' tail, and a fur box, which any self-respecting woman would carry, being completed possibly for all European garments were fashionable—by one of Mrs. Dan Crauford's skirts specially lent for the occasion.

PATRIOTIC VANDALISM.

Nobleman Once Slashed Masterpiece to Prevent Its Sale.

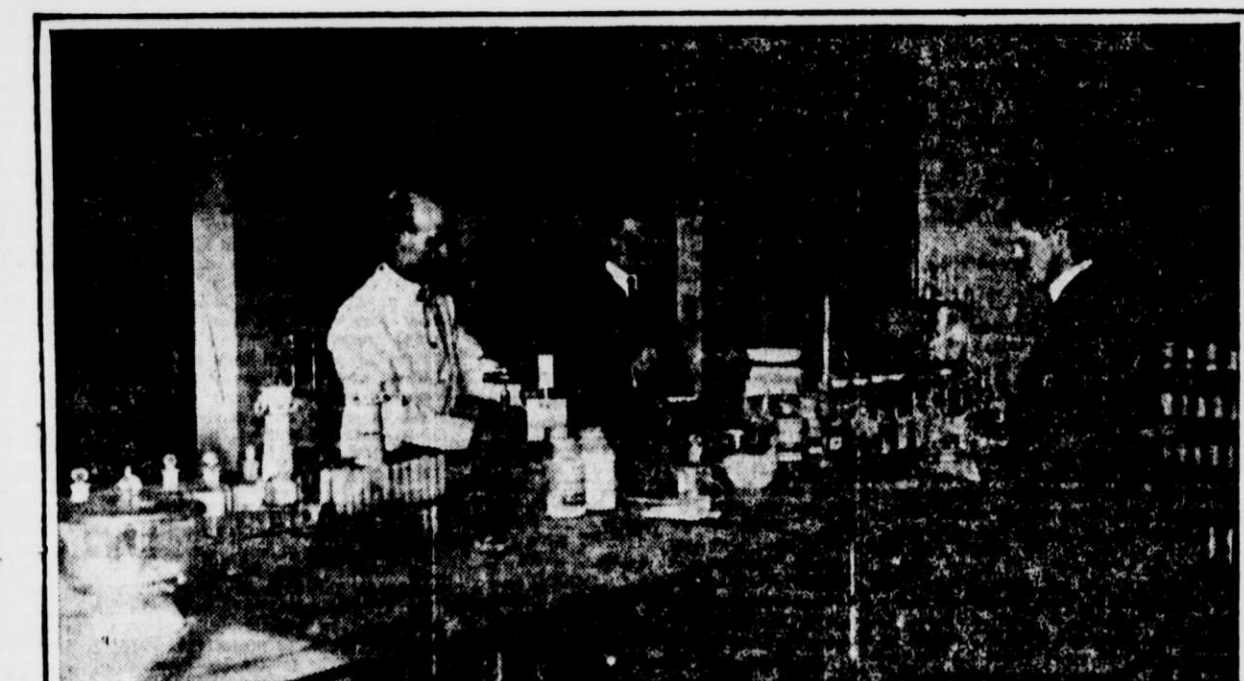
LONDON, Dec. 26.—Picture stories are all the rage at present. The following is one of the most interesting: At Hampton Court palace there is a picture which bears witness to a theft that may be termed patriotic. This is Holbein's "Field of the Cloth of Gold," which after the downfall of Charles I. Cromwell proposed to sell. But when the would-be purchaser came to inspect it he discovered that the head of Henry VIII. had been cut out from the canvas. He refused to buy the picture and it was preserved to the nation. At the Restoration a nobleman confessed to having committed the crime "for love of art and country." He returned the missing head, which now occupies its original position, the circle made by the knife in the canvas being plainly visible.

Price of Seats Reduced.

The house opened with "Quo Vadis." In November, 1911, in February, 1912, the prices were reduced to their present level and in July of the same year Mr. Hammerstein suddenly closed down and returned to America. His regime had been more picturesque than peaceful or profitable.

With the revue "Come Over Here" the opera house enjoyed for a while a full measure of success. A chorus of good looking American girls was brought over and their appearance in costly furs and evening costumes walking down an illuminated gangway laid from the stage to the back of the stalls became the talk of London.

Two stage carpentering sensations, also brought from America, rivalled the "parade of fashion," the race between the train and the motor car, and the mystery of the girls who walked down into a lake and disappeared below the surface in the view of the audience.



Experts of Bureau of Mines in Denver working upon carnotite ores for National Radium Institute. Dr. R. B. Moore on left and Mr. K. L. Kithin in middle.

a film of tin foil or mica will effectually halt the alpha rays. A millimeter of lead or five millimetres of aluminium will stop the turbulent progress of the beta rays, but the gamma rays will go through 19 centimeters of iron or 7 centimeters of lead before their original intensity is reduced one per cent.

The alpha rays consist of positively charged atoms of helium advancing at a velocity of 12,000 miles a second; and the beta rays are negatively charged bodies projected at a speed of quite 19,000 miles in the same interval of time. Roughly, the beta rays are a hundred times more penetrating than the alpha rays, while the gamma rays, in their turn, are a hundredfold as searching as the beta rays. At first, the individualities of these rays was not taken into account by those seeking therapeutic effects and this led to serious mistakes.

The tumor or cancer has a vitality which is of a persistent character. This, like the life of the normal cell, is, as is now known, can actually be stimulated, destroyed, or retarded by the same radiant forces that in a kindred manner affect the surrounding healthy tissue. But there is this distinction, the normal cell is twenty times more resistant to these ray effects than that of the tumorous or cancerous growth. Now keep this fact in mind, and let us again see what Dr. Abbe discovered by his ex-

periments upon seeds and their growth subsequent to radium rays. "We can produce three different effects upon cells by the correct use of radium. First, destruction of life; second, stimulation, and third depression and retrograde change. The surgeon can utilize the third so that he can at will produce that retrograde change in cells which have shown erratic growth and formed life destroying tumors. "Partial success or discouraging failures of the past may be largely due to ignorance of the baneful influence of the alpha and beta rays, which one can now eliminate. In this, I think, we put our finger on the weak spot in radium treatment. If the beta rays stimulate we certainly do not want them; it is fair to say that gamma radiation is our aim."

To the layman the alpha rays, if they can destroy, would seem to be just the medium to employ in attacking cancer. Apparently the gamma rays can only depress or retard the activities of the malignant growth. Why not kill the malady at once and have done with it? Simply because the tissue, inflamed by the attack of the alpha rays, when besieged by the cancerous cells stimulated by the beta rays, is so that that extent weakened in its defense against the inroads of the disease.

It is here that the most wonderful part of this whole problem comes to light. To cure does not mean to root out, but rather to lead back to health. The gamma rays actually induce the affected cells to subside, lose their malignancy and again to become useful and sound elements in the body substance.

Now the far reaching gamma rays, which can be separated from the alpha and beta rays by a screen of lead or by distance alone, have actually proved

that they can make the cancerous cell grow backward, as it were, until it is restored to its normal size—this recession apparently giving the blood a chance to carry away the poisons and to make the hitherto obnoxious structural unit a fit companion for its old neighbors. This is curing in the strictest sense of the term, and probably nature herself does something of the same work when a malignant growth is resorbed spontaneously and disappears.

Dr. Howard A. Kelly of Baltimore, who is conspicuous in the movement to conserve the national sources of radium, has lately declared: "If we could have an abundant supply of radium its use for superficial cancer would yield better results than surgery. It would cure cases of cancer of the nose, eyes, lips, &c., where surgery would mutilate."

In this Dr. Kelly has substantiated what Dr. Abbe has previously established after a wide experience. Because of woman's proneness to cancer in certain organs, radium brings promise of help to those who have the child bearing burden of the world.

Dr. Kelly had cases which could not be treated by the knife because of the general condition of the patients. Radium saved the day and cures have apparently been accomplished. He also had two cases of cancer of the throat. The Gamma rays have cured

treated by Dr. Abbe are of especial interest. One was a patient afflicted with that malignant malady, sarcoma. It was situated upon one eyelid, the lower one, and was a large tumorous growth. It had resisted the attack of Roentgen rays, but rapidly disappeared after being subjected to the gamma rays of radium for four hours. The diseased became a normal lid, and to-day, after nine years, it is impossible for any one to tell where the tumor had been. It was an instance of the "re-assembly of cells normal to the lid out of the mass of tumor."

In 1904 Dr. Abbe treated a destructive and extensive tumor of the jaw with radium. At the time the bone was so soft that the teeth were seemingly set in a pulpy substance. To-day the tumor has been non-existent for nine years and the teeth are solidly imbedded in sound bone. But even this victory for radium pales before the final case described by Dr. Abbe before the seventeenth international congress of medicine. We shall let Dr. Abbe tell this remarkable story in his own way.

"I desire to record one of the most recent and startling disappearances of malignant growth I have ever seen. A gentleman 60 years old was brought to me in May last with numerous tumors in closely related groups on his bald scalp. These developed steadily near an